Titel
Participatory digital mapping with underrepresented communities
Autor*innen
Prof.in Dr.in Köckler H., Dr. Flacke J.
Wieners L., Sahin F., Kaldewey K., Prof.in Dr.in Mikhof A., Pfeffer K., Brüggemann J., Prof. Dr. Walter-Klose C., Dr.in Anthonj C.
Institution
University of Twente, ITC
Hochschule für Gesundheit Bochum
Universität zu Köln

Place is one of the key determinants of health and has different meanings and qualities for different communities. If place is designed, e.g. by urban planning, information on the needs of users is of great relevance. Often interests of communities who are less empowered to participate are underrepresented in urban planning. Therefore, the spatial representation of perceptions and needs of places by underrepresented communities is of great importance for health promotion of marginalised communities.

In the session on participatory digital mapping, different approaches and methods are presented and put for discussion. Examples focus on the one hand on living conditions of homeless people and on the other hand on co-design processes with people with cognitive and/or physical disabilities.

Homeless People in the Ruhr: Exploring Living Conditions and Places

More and more people have to face homelessness. The reasons for homelessness are as manifold as strategies to deal with the situation. After discussing the topic of homelessness in the Urban Health transdisciplinary forum in February 2023 together with international scientists, local stakeholders from the Ruhr and people from the community of homeless people in the Ruhr a joined action started to set up a survey in a co-design process.

The data will be collected by KoboToolbox, a one software applied in the Lab for Digital Participatory Place Analysis (DiPS_Lab) which allows for mapping.

The presentation will report on the co-design process, the data-collection to reach homeless people, the relevance of place for homeless and associated mental health issues as well as the use of the data for knowledge creation for action.

Inclusive Participatory Mapping Tool with People with Disabilities

The basis of fair digital societies is the participation of ALL societal stakeholders. This includes explicitly people with disabilities, who are often underrepresented in participatory activities for different reasons. One of them is, that no digital participatory mapping tools exist that people with disabilities can make use of. In the talk, we present findings and results from two research projects, in which we co-designed an inclusive participatory mapping tool together with people with disabilities, one group with physical, and the second one with cognitive disabilities . While the groups' requirements towards the mapping tool are rather similar, the technical features of the tool to support the mapping differ significantly. Results

are two different versions of the same mapping tool, with both versions containing features that can also facilitate mapping activities of average-abled people.

Knowledge creation in diverse transdisciplinary projects through digital mapping

Transdisciplinary research aims at the creation of a broad problem understanding and knowledge integration, mainly by focussing on the knowledge co-creation by practitioners and scientists. In the projects ParStar and DiMDiCi a joined research group with co-researchers from science, municipality and people with so called cognitive disabilities worked on participatory methods for healthy urban development in general and digital mapping of the walkability of inner-city areas within DiMDiCi in detail.

In this contribution, we reflect on the potential of such diverse groups for transdisciplinary research and present the knowledge gained on empowerment and participation within healthy urban planning by using digital mapping. Furthermore, we put findings on walkability for disabled people in inner-city areas for discussion.

Water, Sanitation, Hygiene and Homelessness in Germany. Challenges, research methods and solutions.

For people experiencing homelessness in Germany, homeless shelters and public toilets are often the only option to access drinking water, sanitation and hygiene (WASH). What is challenging under "normal" circumstances already becomes even more complicated during extreme weather events: during heat waves, more water is needed for hydration and cooling; during floods, public toilets are inaccessible; and during extreme cold, water supplies are disrupted.

Our exploratory study in the City of Bonn, Germany aims to combine and fill two knowledge gaps related to i) challenges homeless people face with regard to WASH, ii) especially during extreme weather events. We involve homeless people as key stakeholders in the research through collaborative problem definition, co-design of the most appropriate data collection methods and analysis techniques, and appropriate inclusive interventions and solution approaches.

Preliminary results of our systematic literature review indicate a paucity of scientific literature that combines both knowledge gaps. Preliminary results of an infrastructure mapping indicate the undersupply of publicly accessible drinking water dispensers, toilets and showers. Preliminary findings of interviews with people experiencing homelessness and social workers taking care of them highlight a variety of challenges related to WASH insecurity, and exposure to associated health risks. In addition, working with population group as vulnerable and mobile as people experiencing homelessness presents significant challenges at different levels, with implications for the choice of data collection tools.

This presentation will introduce a high risk, high gain research project and associated challenges.